4. The compound of claims 3, wherein said linker is selected from the group consisting of

```
-C = C - CH_2 - NH - CO - (CH_2)_5 - NH - CO -,
-C = C - CH_2 - NH - CO - (CH_2)_9 - NH - SO_2 -,
-C = C - CH_2 - NH - CO - (CH_2)_{10} - NH - CO -,
-C = C - CH_2 - NH - CO - (CH_2)_5 -,
-C = C - CH_2 - NH - CO - (CH_2)_5 - NH - CO - (CH_2)_5 -, \text{ and}
-C = C - CH_2 - NH - CO - (CH_2)_5 - NH - CO - (CH_2)_{10} - NH - CO -.
```

5. A compound of the formula (II):

8. A compound of the formula (V):

- 9. A deoxyribonucleic acid sequence containing the 5 compound of formula I.
 - 10. A deoxyribonucleic acid sequence containing the compound of formula II, III, IV, or V.
- 11. A kit for DNA sequencing comprising compounds of 10 formula II, III, IV, and V.

- 12. The kit of claim 11, further comprising a thermostable DNA polymerase.
- 13. The kit of claim 12, wherein said polymerase is a thermostable DNA polymerase that has an altered dNMP 5 binding site so as to improve the incorporation of dideoxynucleotides relative to the natural polymerase.
 - 14. Method for determining the nucleotide base sequence of a DNA molecule comprising the steps of:

incubating a DNA molecule annealed with a primer molecule able to hybridize to said DNA molecule in a 10 vessel containing a thermostable DNA polymerase, one of a set of four dye terminators with an linker of at least 10 atoms between the dye and the nucleotide and

> separating DNA products of the incubating reaction according to size whereby at least a part of the nucleotide base sequence of said DNA molecule can be determined.

Method for determining the nucleotide base sequence of a DNA molecule comprising the steps of:

20 incubating a DNA molecule annealed with a primer molecule able to hybridize to said DNA molecule in a vessel containing a thermostable DNA polymerase, a compound of formula I and

separating DNA products of the incubating 25 reaction according to size whereby at least a part of the nucleotide base sequence of said DNA molecule can be determined.

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16. Method for determining the nucleotide base sequence of a DNA molecule comprising the steps of:

incubating a DNA molecule annealed with a primer molecule able to hybridize to said DNA molecule in a vessel containing a thermostable DNA, a compound of formula II, III, IV, or V and

separating DNA products of the incubating reaction according to size whereby at least a part of the nucleotide base sequence of said DNA molecule can be determined.

17. The method of any of claims 14, 15, or 16 wherein said polymerase is a thermostable DNA polymerase that has an altered dNMP binding site so as to improve the incorporation of dideoxynucleotides relative to the natural polymerase.